

Abstract of the Disclosure

A tire sensor device comprising sensor modules 20A to 20D, each comprising a sensor, a communication module having a communication function and a power regenerating circuit, and an antenna; and a base station comprising an internal communication device for communication with the sensor modules 20A to 20D, an information processing device for processing tire information signals from the sensor modules, an external communication device for communicating with a car control device 40 on the car body side and a power source. The sensor modules 20A to 20D and the base station 30 are arranged in the tire and constitute an intra-tire LAN. Tire information signals transmitted from the sensor modules 20A to 20D are processed by the base station 30 and transmitted to the car control device 40 so that appropriate tire information can be obtained and the size and power consumption of the sensor device can be reduced.